TechWomen Ambassadors Week

Stemspirational Event for 9th grade Girls in NH

5 Locations
10 Schools

November 16- 20, 2015

9th Grade Girls

TechWomen Ambassadors

High School Attendees

400 9th Grade Girls
89 TechWomen Ambassadors
245 High School Attendees

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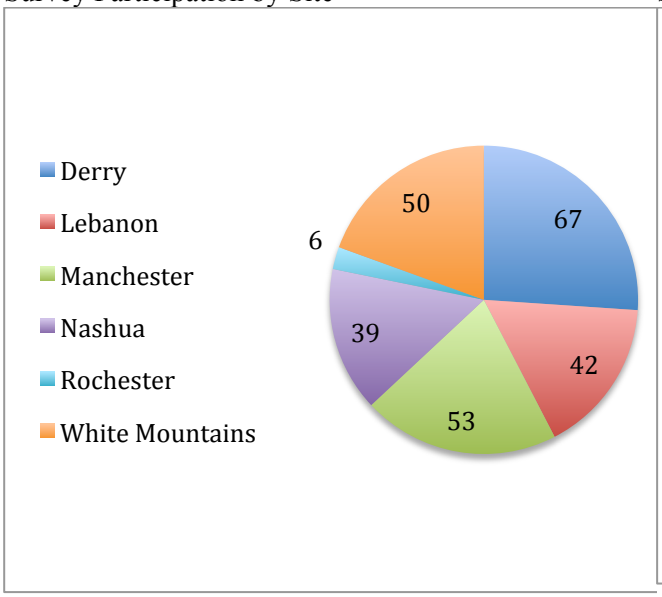
Evaluation Survey Preliminary Analysis

Six Participating Sites: Derry, Lebanon, Manchester, Nashua, Rochester, and White Mountains
Total Survey Participants: 257[1]

Survey Participation by Site



Survey Participation by Age

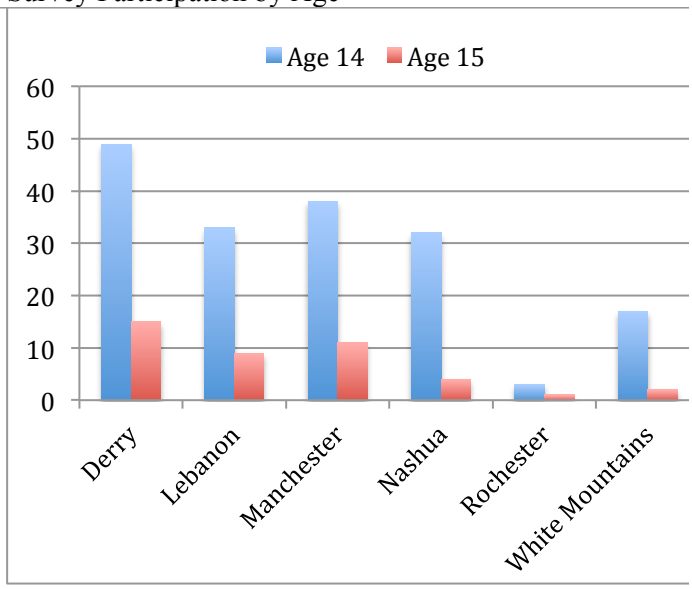


Figure 1 Survey participation by site and age.

Outcomes

To measure the impact of the TechWomen Ambassadors event on girls, responses from a survey administered at the end of the event were analyzed. The survey consisted of 29 items, which align to 5 constructs:

- Confidence in own abilities to use, fix, investigate, and invent technologies
- Intent to persist by taking STEM courses, seeking internships and other STEM-related summer experiences, learning more about women's experiences in tech-related professions and how to connect with women in tech fields
- Interest in using, fixing, investigating, and inventing technologies
- Expectations of holding a degree in tech
- Perceived social support to succeed in tech field of study and career.

For each construct a composite score was calculating by summing the responses to the items associated with that composite and then dividing by the total points possible. For ease of interpretation, the composites were put on a 100-point scale, where the lowest response option on each scale was set to 0 and the others were adjusted accordingly.

[1] Only 6 surveys were collected from the Rochester site.

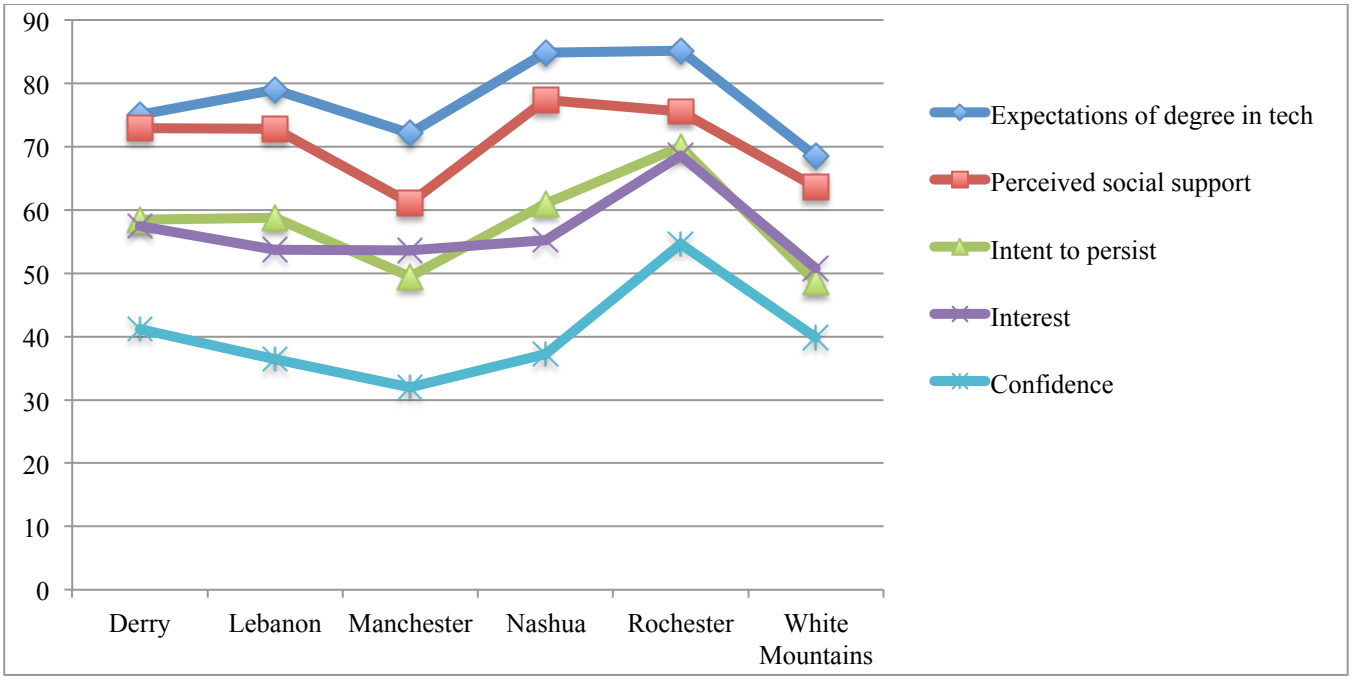


Figure 2. Composite scores of the survey constructs for all sites

A preliminary analysis of the composite scores shows that, regardless of site, the expectations of a degree in tech and perceived social support have been ranked the highest, while level of confidence was ranked the lowest. Interest and intent to persist fell in the middle.

These results suggest that the TechWomen Ambassadors were effective in convincing the girls that pursuing tech fields of study and careers results in highly paid and rewarding jobs. The girls who participated in the survey felt supported in their goal to become successful in a tech field. The findings suggest that there is a gap between the girls' confidence in their own abilities and these positive signs of expectations, perceived social support, and interest in the field.

We recognize that a two-hour event cannot enable change in the girls' level of confidence, but it creates a promising starting point where mentorship relationships can be built between the girls and professional women.

We are reassured by this preliminary data analysis of the survey data that the very purpose of the event to inspire girls to pursue tech degrees and feel supported has been achieved. The survey findings also help us prepare the next event with more engaging activities that increase interest in the field.

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Evaluation Survey

This brief survey will help us learn more about your experience at the **TechWomen Ambassadors** event. It will take about 10 minutes to complete.

This is not a test! There are no right or wrong answers. Just give your honest responses.

	Right now, how confident are you in your ability to …	**Not at all confident**	**Only slightly confident**	**Confident**	**Very confident**
1	Use new computer software (For example, a geographic information system or image processing tool)				
2	Fix a broken device or build a machine out of parts (For example, fixing a robot or building a sensor-based apparatus to take measurements)				
3	Investigate a technology-related problem (why a program is too slow or a robot does not sense light changes)				
4	Solve a problem by using technology (For example, analyze data with a spreadsheet tool, write code to modify a game, or test a hypothesis by using an engineering prototype)				
5	Think of new technology inventions (For example new apps or improved tablets)				
6	Actually create new technology inventions (For example a new social media platform or a system that recycles rain water)				

	How much would you want to learn more about …	**Not at all interested**	**Only slightly interested**	**Interested**	**Very interested**
7	What courses to take to prepare for technology-related fields of study and careers				
8	Women's experiences in technology-related professions and careers				
9	Technology-related internships at local companies				
10	Summer learning experiences that focus on computing, engineering, and technology				
11	How to connect and get advice from women in tech fields				

	How much would you want to …	**Not at all interested**	**Only slightly interested**	**Interested**	**Very interested**
12	Use new computer software (For example, a geographic information system or image processing tool)				
13	Fix a broken device or build a machine out of parts (For example, fixing a robot or building a sensor-based apparatus to take measurements)				
14	Investigate a technology-related problem (why a program is too slow or a robot does not sense light changes)				
15	Solve a problem by using technology (For example, analyze data with a spreadsheet tool, write code to modify a game, or test a hypothesis by using an engineering prototype)				
16	Think of new technology inventions (For example new apps or improved tablets)				
17	Actually create new technology inventions (For example a new social media platform or a system that recycles rain water)				

	If I were to get a college degree in science, computing, engineering, or math, I would probably …	Strongly disagree	Disagree	Agree	Strongly agree
18	Make good money				
19	Get respect from other people				
20	Do work that I would enjoy				
21	Get a job that my family would be proud of				
22	Do work that can make a difference in people's lives				
23	Find a job easily				

	Please state your level of agreement with the following statements	Strongly disagree	Disagree	Agree	Strongly agree
24	Important people in my life think it's good for me to learn about computing, engineering, and other technology fields.				
25	I believe people like me can do well learning math, science, computing, and engineering.				
26	My family likes me to learn about computing, engineering, and other technology fields.				
27	My friends believe it's cool that I learn about computing, engineering, and other technology fields.				
29	I believe people like me can do well in technology jobs.				
28	I believe people like me can create new technological inventions.				

What is one thing you learned that you didn't know before?

What, if anything, is stopping you from taking computing, engineering, and technology courses?

What was the most meaningful part of this event? Why?

Your age ____ Identify your race/ethnicity as (mark all that apply):
__ Asian __ Black/African-American __ Hispanic/Latina
__ Native American/Alaska Native __ White/Caucasian

What languages do you speak at home (mark all that apply): __ English __ Spanish ___Other

If Other _____
List the other languages you speak at home

Would you be interested in being a **TechGirl Ambassador** to help to encourage younger girls to careers in STEM/STEAM in the younger grades 1 – 6 in your school district?

If so please provide contact information: Name: _____ Email _____